

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF PENNSYLVANIA**

eleven of their cement production facilities nationwide. Following negotiations with Lehigh, Plaintiffs moved to enter a consent decree. *See* Mot., ECF No. 31. Lehigh responded, agreeing with entry of the proposed decree.³ *See* Resp., ECF No. 34. Because the proposed Consent Decree is fair, reasonable, and consistent with the objectives of the CAA, the Motion to Enter Consent Decree is granted.

ii. BACKGROUND

Lehigh produces cement at facilities across the United States and Canada. *See* Memo. 2, ECF No. 32. The cement is produced by taking raw materials, often obtained in quarries, and gradually introducing heat. *See id.* at 3. The heat source—and focal point of this matter—is the kiln. *See id.* As the raw materials pass through the kiln, they are gradually heated, producing a final product called “clinker,” the primary ingredient in cement. *See id.* During the production of clinker, the kiln emits significant amounts of Nitrogen Oxide (NO_x) and Sulfur Dioxide (SO₂). *See id.* at 4.

Both NO_x and SO₂ are air pollutants. *See id.* NO_x contributes to ground-level ozone, and SO₂ contributes to acid rain. *See id.* When combined, these compounds form a fine particulate matter called PM_{2.5}, which is known to have adverse effects on human health. *See id.* PM_{2.5} can negatively affect the respiratory system and aggravate existing cardiovascular disease. *See id.*

In an effort to enforce CAA provisions relating to NO_x and SO₂ pollution, the United States and multiple State Plaintiffs brought an enforcement action against Lehigh, seeking injunctive relief and payment of applicable penalties. The Plaintiffs asserted the following

³ Lehigh notes, however, that certain timing provisions are in continuing negotiation due to the COVID-19 pandemic. *See* Resp. In its response to the present motion, Lehigh expressed its hope that those negotiations will continue in good faith following entry of the decree. *See id.* The Plaintiffs stated in their motion that they anticipate entering into a modification extending those deadlines if this Court grants entry of the proposed decree. *See* Memo 2 n.2.

claims against Lehigh: (1) violation of the Prevention of Significant Deterioration provisions of the CAA, 42 U.S.C. §§ 7470-7492, (2) violation of the nonattainment New Source Review provisions of the CAA, 42 U.S.C. §§ 7501-7515, (3) violation of Lehigh's federally-approved State Implementation Plans, and (4) violations of state environmental law. *See id.* at 1-2.

In lieu of pursuing those claims, the Plaintiffs propose the present consent decree. *See* Decree, ECF No. 2. The proposed decree mandates that Lehigh install and operate emissions control technology on the kilns identified in the decree. *See id.* at ¶¶ 12-14, 20-25. Through use of this technology, Lehigh must meet fixed⁴ emissions limits for both NO_x and SO₂. *See id.* The proposed decree specifically provides (1) the type of technology that Lehigh must install on each kiln, (2) the deadline for operation of that technology, and (3) 30-day rolling average emissions limits for NO_x and SO₂ on a kiln-by-kiln basis. *See id.* at Tbl. 2, Tbl 3. The emissions limits are to remain enforceable after the termination of the decree by incorporation into a state permit or rule. *See id.* at ¶¶ 108-110.

To monitor Lehigh's compliance with these limits, the proposed decree requires installation of continuous emissions monitoring systems (CEMS).⁵ *See id.* at ¶¶ 15-19, 26-30. Lehigh must install and continuously operate CEMS on each stack or other air pollution output to measure both NO_x and SO₂ emissions. *See id.* Lehigh must then use the data recorded and stored by the CEMS to prepare semi-annual reports as required under the terms of the proposed

⁴ The Plaintiffs' motion notes that, while most limits are fixed by the decree, two limits will be determined at a later date. *See* Mot. at 4-5. With respect to Lehigh's Cupertino, California facility, the SO₂ emissions limit will be determined through testing conducted by Lehigh. *See id.* With respect to Lehigh's Mitchell facility in Indiana, Lehigh has a choice to bring its existing kilns within compliance or install entirely new kilns. *See id.* at 5. The compliance range for new kilns differs from that of the existing kilns. *See id.*

⁵ The CEMS sample, record and store emissions data from the point sources. *See* Decree ¶8(f). This data is later used to compile the semi-annual reports required under the terms of the proposed decree. *See id.* ¶¶ 54-60.

decree. *See id.* at ¶¶ 54-60. A failure to report or to meet the emissions limits carries with it stipulated penalties set forth in the proposed decree. *See id.* at ¶¶ 61-69, Tbl. 4, Tbl. 5. The stipulated penalties accrue by the day and are scaled according to the type and severity of the violation. *See id.* at Tbl. 4.

In addition to the stipulated penalties for future violations of the proposed decree, Lehigh must pay a penalty of \$1.3 million to compensate for prior violations of the CAA. *See id.* at ¶¶ 9-11. Of that amount, exactly half is payable to the United States, and the other half is divided amongst the State Plaintiffs as set forth in Table 1. *See id.* at Tbl. 1. Finally, the consent decree resolves Lehigh's liability for New Source Review claims regarding NO_x and SO₂ emissions prior to the effective date of the proposed decree. *See id.* at ¶¶ 92-98.

Plaintiffs published the proposed decree in the Federal Register on December 11, 2019, and opened a 30-day comment period. *See* Memo. at 6. That period was extended a total of 31 days, and it closed on February 10, 2020. *See id.* During the comment period, the Department of Justice received eight sets of public comments, with one commenter providing multiple sets of comments. *See id.* The Plaintiffs substantively responded to these comments in their Responsiveness Summary filed along with the present motion. *See id.* at Ex. A, ECF 32-1.

III. LEGAL STANDARD – REVIEW OF PROPOSED CONSENT DECREE

A court “should approve a proposed consent decree if it is fair, reasonable, and consistent with [the statute]’s goals.” *United States v. Se. Pa. Transp. Auth.*, 235 F.3d 817, 823 (3d Cir. 2000) (citing *United States v. Cannons Eng’g Corp.*, 899 F.2d 79, 85 (1st Cir. 1990)).

“In evaluating the fairness of a consent decree, a court should assess both procedural and substantive considerations.” *In re Tutu Water Wells CERCLA Litigation*, 326 F.3d 201, 207 (3d Cir. 2003). “Procedural fairness requires that settlement negotiations take place at arm’s length.”

Id. Inquiry into substantive fairness asks whether the “terms of the consent decree are based on ‘comparative fault’ and apportion liability ‘according to rational estimates of the harm each party caused.’” *Id.* (citing *SEPTA*, 235 F.3d at 823). “As long as the measure of comparative fault on which the settlement terms are based is not arbitrary, capricious, and devoid of a rational basis, the district court should uphold it.” *Id.* (citing *SEPTA*, 235 F.3d at 824).

The next inquiry, reasonableness, is tri-faceted. *See Cannons*, 899 F.2d at 89. The first and most important facet is the “decree’s likely efficaciousness as a vehicle for cleansing the environment.” *See id.* (citing *United States v. Cannons Eng’g Corp.*, 720 F. Supp. 1027, 1038 (D. Mass. 1989)). The second is “whether the settlement satisfactorily compensates the public for the actual (and anticipated) costs of remedial response measures.” *Id.* at 90. The third and final facet involves the “relative strength of the parties’ litigating positions.” *Id.* Where the government’s case is “strong and solid, it should typically be expected to drive a hard bargain.” *Id.*

IV. DISCUSSION

A. Fairness of the Proposed Decree

The first of three inquiries into a consent decree is its fairness. The Court must review the proposed decree for both procedural fairness in its formation and substantive fairness in its content. *See Tutu Water Wells*, 326 F.3d at 207. In the present case, the proposed decree is both procedurally and substantively fair.

On the matter of procedural fairness, both parties agree that the proposed consent decree is the product of years’ worth of arm’s length bargaining. *See* Memo 16-17; Resp. 1. Additionally, there is no indication that either party bargained in bad faith or in any manner besides arm’s length. Therefore, the Court finds that the proposed decree is procedurally fair.

In determining substantive fairness, the Court must look to the terms of the agreement to determine if they fairly apportion liability through a system of comparative fault, ensuring the system is not arbitrary, capricious, or devoid of rational basis. *See id.* (citing *SEPTA*, 235 F.3d at 824). As stated above, the terms of the proposed decree would require the Lehigh to (1) pay a fine of \$1.3 million, (2) implement and operate new pollution abatement technology in order to meet specified emissions limits, and (3) report its degree of compliance with those emissions limits on a semi-annual basis using data collected from the CEMS.

To formulate the proper penalty amount, the Plaintiffs considered numerous factors, including the statutory factors under the CAA, Lehigh's cooperation, the risks and costs of pursuing individual investigations of each facility, the need to provide deterrence, and comparable settlements in related cases. *See* Memo. 13-14; Burke Declr. ¶ 24.⁶ In selecting the required technology and setting the emissions limits, the Plaintiffs considered the possible relief available through litigation, baseline emissions, the type of kilns used by Defendants, the capabilities of available abatement technology, the opinions of the state regulator, and available raw materials. *See id.* at ¶ 39. Moreover, the Plaintiffs took steps to ensure that the emission limits survive the eventual termination of the proposed decree. Finally, the Plaintiffs took steps to ensure compliance with both the penalty and emissions provisions by requiring the installation of CEMS and semi-annual reporting of the collected data.

Based on the extensive considerations undertaken by the Plaintiffs in crafting the specific provisions of the consent decree, this Court finds that the substantive terms of the decree are not

⁶ Shaun Burke is an Environmental Engineer with the EPA. *See* Burke Declr. ¶ 1. In addition to the present proposed decree, Burke was the lead engineer on twelve other consent decrees involving cement production facilities across the United States. *See id.* ¶ 7, Tbl. 1.

arbitrary, capricious, nor devoid of any rational basis in their assignment of comparative fault and apportionment of liability. Therefore, the proposed consent decree is substantively fair.

B. Reasonableness of the Proposed Decree

After assessing fairness, the Court must undertake the tri-faceted reasonableness inquiry. Under the first facet, the Court must ascertain whether the decree is efficacious as a vehicle for cleansing the environment. *See Cannons*, 899 F.2d at 89. By its terms, the proposed decree requires the Defendants to install and implement pollution abatement technology to reduce the amount of NO_x and SO₂ emitted by the kilns in the cement-making process.⁷ *See* Memo. 7. Through the implementation of this technology, the Plaintiffs estimate that the Defendants' facilities will see a reduction of 4,555 tons of NO_x and 989 tons of SO₂ per year. *See* Burke Declr. ¶ 40. To ensure these reduction estimates are met, the proposed consent decree sets emissions as 30-day rolling averages. *See id.* at ¶ 22. A 30-day rolling average requires more stringent and consistent adherence with pollution control, whereas annual limits allow for greater peaks and valleys in pollution over the course of the year. *See id.*; *see also* Memo. 9.

In order to meet these stringent limits, the Plaintiffs estimate that each regulated kiln will “need to operate at approximately 15-30% below the specified limit.” *See* Burke Declr. ¶ 48. Based on these strict limits and the use of 30-day rolling averages, the Plaintiffs believe the actual reduction in emissions will outperform the limits set by the proposed consent decree.⁸ *See id.* at 9.

⁷ Like the emission limits, the technology required for each kiln is specified on a kiln-by-kiln basis. For abatement of SO₂, the Defendants must install and operate, (1) lime injection, (2) kiln-inherent scrubbing and/or lime injection, or (3) a wet scrubber, depending on the type of kiln at issue. *See* Decree ¶ 20, Tbl. 3. For abatement of NO_x, the Defendants must install and operate “selective non-catalytic reduction systems.” *See id.* at ¶ 12, Tbl. 2.

⁸ The public comments, as well as letters received by the Court after the comment period had opened, expressed concern that the emissions limits set by the proposed decree are not strict

On these facts, the Court finds that the proposed consent decree is effective as a vehicle for cleansing the environment. It provides specific technology that must be implemented, and it requires that Lehigh operate that technology to achieve a stringent emissions reduction goal on a 30-day rolling average. Furthermore, the proposed decree drives compliance through the installation of CEMS on each kiln, which will record and store data on Lehigh's NO_x and SO₂ emissions to be reported semi-annually. Should Lehigh fail to meet the emissions limits or report its CEMS data, it faces steep penalties assessed by the day.⁹ Thus, the proposed decree is reasonable with respect to the first facet.

The second facet requires inquiry into whether the proposed decree adequately compensates the public for the cost of the remedial measures. *See Cannons*, 899 F.2d at 90. This facet is most commonly discussed with respect to consent decrees entered under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). *See SEPTA*, 235 F.3d 817; *United States v. Wyeth Holdings LLC*, Civ. No. 15-7153, 2015 WL 7862724 (D.N.J. Dec. 3, 2015); *United States v. Kramer*, 19 F. Supp. 2d 273 (D.N.J. 1998). In these cases, courts analyze the percentage of cleanup costs that the government will recoup from

enough. The Court considered the concerns in its analysis. In addition, the Court notes the added concerns that accompany emissions limits that are too strict, namely ammonia slip and detached plumes. *See Burke Declr.* ¶ 56. Ammonia slip occurs when excess ammonia fails to react with and neutralize NO_x emissions, and it can be caused by attempting to inject too much ammonia into the emissions stream. *See Memo.* 9. When that excess ammonia combines with sulfates, it can create what is called a "detached plume," which is another harmful form of air pollution. *See id.*; *Burke Declr.* ¶ 56. This was yet another factor the Plaintiffs considered when determining the appropriate emissions limits, and the Court likewise took it into account when reviewing the proposed decree.

⁹ The public comments and letters also expressed concern with whether or not the proposed decree could be enforced. Notwithstanding the concern, the CEMS requirements, semi-annual reports, and daily assessment of fines for violation depict a strong plan for enforcement on the part of the Plaintiffs. Additionally, the Plaintiffs directly addressed concerns about which regulatory bodies are responsible for enforcing these provisions at the individual facilities that were the subject of the public comments. *See Memo.* at Ex. A 47-48.

the violating party through entry of the consent decree. *See, e.g., Wyeth Holdings*, 2015 WL 7862724, at *2 (noting defendant agreed to reimburse all but \$800,000 of its previous cleanup costs and pay \$193,500,000 going forward for cleanup); *Kramer*, 19 F. Supp. 2d at 287 (finding compensation to public satisfactory where public would recoup 77% of total pollution cleanup costs). However, unlike a CERCLA consent decree, the proposed decree before this Court does not involve the post-hoc cleanup of pollutants. Instead, it attaches a penalty for past violations of the CAA and orients Lehigh toward future compliance with CAA requirements. As such, the entire monetary burden of the installation and operation of the pollution control technology rests squarely on Lehigh.

Courts to review the second reasonableness facet in the CAA context review the adequacy of the factors used to calculate the penalty or fine. *See, e.g., United States v. Harley Davidson, Inc.*, No. 16-cv-1687(EGS), 2020 WL 5518466, at *8-9 (D.D.C. Sept. 14, 2020). In calculating the penalty in this case, the Plaintiffs considered the statutory factors under the CAA, Lehigh's cooperation across eleven facilities, the risks and costs of pursuing individual investigations of each facility, the need to provide deterrence, the litigation risk and costs associated with pursuing claims against Lehigh, and comparable settlements in twelve other cement production CAA cases across 41 facilities. *See* Memo. 13-14; Burke Declr. ¶ 24; *see also Harley Davidson*, 2020 WL 5518466, at *9 (finding penalty reasonable where government considered statutory factors, defendant's cooperation, litigation risk, and penalties in similar cases). Given the broad spectrum of appropriate considerations used to calculate Lehigh's penalty, the Court finds the proposed decree is reasonable with respect to the second facet.¹⁰

¹⁰ The public comments and letters also expressed concern that the penalty was too low. Notwithstanding, the facts show that the Plaintiffs undertook extensive and appropriate considerations when determining the appropriate size of the penalty.

Finally, the third facet requires inquiry into the relative strengths of the litigation positions of the parties. *See Cannons*, 899 F.2d at 89. Although the Plaintiffs do not discuss in certain terms the strength or weakness of their case against Lehigh, the supporting memorandum makes clear that litigation risk was a constant consideration. In fact, litigation risk was considered with respect to setting the emissions limits and setting the civil penalty, two of the most important aspects of the consent decree. *See Memo.* 8, 14, 17-18. Therefore, the proposed consent decree is reasonable insofar as it reflects the relative litigation strengths and weaknesses of the parties.

C. The Proposed Decree's Fidelity to the CAA

Finally, this Court must determine whether the proposed consent decree comports with the objectives set forth in the CAA. In its Declaration of Purpose, the CAA states that its purpose is “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population” 42 U.S.C. § 7401(b)(1). It further states “[a] primary goal of this chapter is to encourage or otherwise promote reasonable Federal, State, and local governmental actions, consistent with the provisions of this chapter, for pollution prevention.” *See id.* § 7401(c).

Here, the proposed decree advances these objectives. As discussed above, the proposed decree would require the implementation and operation of technology by Lehigh to facilitate achievement of stringent emissions limits. These limits would reduce NO_x emissions by an estimated 4,555 tons per year and SO₂ emissions by an estimated 989 tons per year. Moreover, Plaintiffs believe that the actual reductions could be greater. The reduction of air pollution through control and abatement technology is the hallmark objective of the CAA. Additionally, both the reporting and accompanying penalty provisions of the proposed consent decree hold

Lehigh accountable for prior violations, and promise to hold them accountable for any future violations. These compliance provisions further the CAA goal of promoting reasonable federal, state, and Local action to achieve air pollution prevention.

Through its stringent emissions requirements and strong enforcement provisions, the proposed decree comports with the key objectives of pollution reduction and accountability in the CAA. Therefore, the proposed consent decree comports with the objectives of the CAA.

V. CONCLUSION

The proposed consent decree is fair, reasonable, and true to the purpose of the CAA. The proposed decree is the product of years' worth of arm's length negotiations, and it represents a substantively fair accounting of Lehigh's fault. Furthermore, the terms of the proposed decree are reasonable, insofar as they are an effective vehicle for controlling pollution, they adequately compensate the public, and they reflect the relative litigation strengths of each party. Finally, the proposed decree comports with the objectives of the CAA in that it will both abate pollution and promote long-term compliance with stringent reduction limits. Accordingly, the Motion to Enter Consent Decree is granted.

A separate Order follows.

BY THE COURT:

/s/ Joseph F. Leeson, Jr.
JOSEPH F. LEESON, JR.
United States District Judge